

# WARGAMING AND THE INTERAGENCY

BY

LIEUTENANT COLONEL (P) LOUIS J. LARTIGUE, JR.  
United States Army

DISTRIBUTION STATEMENT A:

Approved for Public Release.  
Distribution is Unlimited.

USAWC CLASS OF 2008

This SSCFP is submitted in partial fulfillment of the requirements imposed on Senior Service College Fellows. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.



U.S. Army War College, Carlisle Barracks, PA 17013-5050



REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. <b>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.</b>					
1. REPORT DATE (DD-MM-YYYY) 01-05-2008		2. REPORT TYPE Civilian Research Project		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE  Wargaming and the Interagency				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)  LTC(P) Louis J. Lartigue, Jr.				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Security Studies Program Massachusetts Institute of Technology 292 Main St. Cambridge, MA 02139				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Dr. Barry Posen Massachusetts Institute of Technology Security Studies Program 292 Main St. Cambridge, MA 02139				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT  DISTRIBUTION A: UNLIMITED					
13. SUPPLEMENTARY NOTES The views of the academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.					
14. ABSTRACT This paper examines the use of strategic wargaming to improve interagency coordination and national policy formulation. This study addresses the following: <ul style="list-style-type: none"> <li>What benefits do wargames provide and what is their applicability at the strategic level?</li> <li>How is wargaming being used at the strategic level?</li> <li>What does wargaming not "do" well at the strategic level?</li> <li>How could strategic wargaming be integrated for interagency planning and what are possible constraints and barriers?</li> </ul> The conclusions find that the literature and uses of wargaming reveal its potential benefits and applicability at the strategic level. Strategic wargaming (especially table-top, role-playing games) provides a venue that allows participants to engage in an analytical dialogue that enables an exploration of their roles, actions, and possible outcomes of the simulated scenario. There are, however, limitations as to the direct conclusions players can gain from wargaming. Because of the myriad of forces that bear strategic and policy-level questions, and the assumptions that are required to simulate these settings, the use of wargaming for rigorous analysis is questionable. But, the other benefits such as discussing conditions that may drive decisions, synchronizing possible actions, evaluating resources required to take those actions, and discovering other questions that need to be explored about the situations can be powerful takeaways. Despite areas of possible governmental resistance, wargaming					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED	UNLIMITED	20	19b. TELEPHONE NUMBER (include area code)



USAWC CIVILIAN RESEARCH PAPER

## **WARGAMING AND THE INTERAGENCY**

by

Lieutenant Colonel (P) Louis J. Lartigue, Jr.  
United States Army  
Senior Service College Fellow at MIT-Security Studies Program

Dr. Barry Posen  
Program Adviser

### *Disclaimer*

*The views expressed in the academic research paper are those of the author and do not necessarily reflect the official policy or position of the US Government, the Department of Defense, or any of its agencies.*

U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013



## **ABSTRACT**

**AUTHOR:** LTC(P) Louis J. Lartigue, Jr.

**TITLE:** Wargaming and the Interagency

**FORMAT:** Civilian Research Project (CRP)

**DATE:** 1 May 2008

**WORD COUNT:** 5,600

**PAGES:** 20

**CLASSIFICATION:** Unclassified

This paper examines the use of strategic wargaming to improve interagency coordination and national policy formulation. This study addresses the following:

- What benefits do wargames provide and what is their applicability at the strategic level?
- How is wargaming being used at the strategic level?
- What does wargaming not “do” well at the strategic level?
- How could strategic wargaming be integrated for interagency planning and what are possible constraints and barriers?

The conclusions find that the literature and uses of wargaming reveal its potential benefits and applicability at the strategic level. Strategic wargaming (especially table-top, role-playing games) provides a venue that allows participants to engage in an analytical dialogue that enables an exploration of their roles, actions, and possible outcomes of the simulated scenario. There are, however, limitations as to the direct conclusions players can gain from wargaming. Because of the myriad of forces that bear strategic and policy-level questions, and the assumptions that are required to simulate these settings, the use of wargaming for rigorous analysis is questionable. But, the other benefits such as discussing conditions that may drive decisions, synchronizing possible actions, evaluating resources required to take those actions, and discovering other questions that need to be explored about the situations can be powerful

takeaways. Despite areas of possible governmental resistance, wargaming should be codified and used as part of the interagency process.



## WARGAMING AND THE INTERAGENCY

Wargaming can be an effective tool for analyzing a plan's completeness and potential effectiveness with respect to the anticipated conditions of a situation. At some of its lowest, tactical-levels of application, it can demonstrate how your intended course of action completes the mission at hand. Military planners have determined that wargaming is an effective enough method of plan analysis that it is a part of almost all versions of military decision making processes. At the tactical and operational levels, it is almost always required in the military planning process and in joint planning doctrine. Conducting a battalion or brigade deliberate attack against a prepared enemy without wargaming your courses of action against known and expected enemy actions could be seen as missing an important opportunity to further refine and synchronize your plan.

But, as one leaves the tactical and operational levels, wargaming's usefulness as an analytical tool becomes less reliable. One can argue that the inability to simulate in a wargame the myriad of factors that influence decisions and actions at the strategic level could lead to false conclusions. That notwithstanding, the process of conducting such a strategic-level wargame could itself bring out factors that should be considered in planning, even if the right answer is not obvious or verified by the game.

Today, there is ongoing debate and study concerning the methods and capabilities of the U.S. Government's application of the elements of national power in achieving strategic objectives. The synchronization of diplomatic, informational, military, and economic (D.I.M.E.) actions to achieve a strategic goal is recognized by most as important to achieving meaningful, efficient, and long-term success. Critical to achieving this synchronization is the government's

ability to coordinate goals, actions, and resources across the agencies of government to gain complementary effects.

There are many efforts underway that are studying the issues involved with Interagency Coordination with the goal of identifying barriers/issues in our current processes and describing solutions that could improve the way government plans and delivers effects. One of those efforts is being conducted by The Center for Strategic and International Studies. Their study, “Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era”, includes an integrated list of recommendations to enhance interagency coordination and capabilities. One of those recommendations is the inclusion of wargaming as part of the interagency process:

***Establish an annual table-top exercise program for senior national security officials to practice managing future national security challenges and identify capability shortfalls that need to be addressed.***

“This exercise program would serve several functions. First, it would allow senior national security officials an opportunity to experience managing a crisis or complex operation, without the costs and risks involved in a real-world situation. Second, each exercise would enable these officials to identify courses of action that might prevent or deter a crisis and responses the United States should explore and develop further. Finally, these simulations would enable the participants to identify critical gaps in U.S. capabilities and task development of action plans to address them. Progress in implementing these action plans could be reviewed in subsequent exercises or as part of the biannual National Security Planning Guidance process.”<sup>1</sup>

This paper aims to examine the possible application and benefits of this recommendation and to consider the possible constraints and limitations of using wargaming to improve the interagency coordination. This study will do this by addressing the following:

- What benefits do wargames provide and what is their applicability at the strategic level?

- How is wargaming being used at the strategic level?
- What does wargaming not “do” well at the strategic level?
- How could strategic wargaming be integrated for interagency planning and what are possible constraints and barriers?

***What benefits do wargames provide and what is their applicability at the strategic level?***

Wargames and simulations can take many forms, from computer based clashes of icons where victory is determined by algorithms or dice roles, to free-form table-top exercises where actions and outcomes are based on the interaction of role-players. At the strategic level of decision making and planning, many different factors bear on the outcome of intended actions. Many of the factors that impact actions, such as political or cultural sensitivities, are not well suited for automated or algorithmic analysis. Dr. Kenneth Watman, former Chairman of the War Gaming Department at the Naval War College explored the role of wargaming in examining the future. He observed, “War games are an important tool for providing military decision makers with the opportunities to practice those decisions and evaluate their consequences.”<sup>2</sup> He also found that, “the game is a powerful vehicle for communicating the analytical results and eliciting military professional judgment about those results.”<sup>3</sup>

Wargaming and the gaming of policy problems have been around a long time and while their forms have changed with the problems of the day, the games’ basic benefit remains the same: they provide a self-contained analytical environment in which players explore the constraints that form current strategic problems, examine issues arising under them, and compare possible solutions. In short, political-military games allow players—policy makers, civil servants, and war fighters—to examine their assumptions about a problem and solutions.<sup>4</sup>

Political Scientists and gaming practitioners have explored and debated the benefits and applicability of strategic gaming for years. The role of games and simulations became a more serious topic as automated capability increased in the late 20<sup>th</sup> century and as the Cold War provided a wide field of strategic questions that could be addressed in simulation. *Orbis, A Journal of World Affairs*, published a compilation of articles in the mid 80's that described the applicability of gaming at the strategic level. A review of the conclusions of these articles provides a good description of some central themes worthy of discussion.

Dr. Garry Brewer outlines the scope of the debate as he poses the following:

Political-military games directly addressed a number of important questions:

- What political options could be imagined in light of the military situations portrayed, and what likely consequences would each have? How, in other words, are forces related to political ends?
- Could political inventiveness be fostered by having those actually responsible assume their roles in a controlled, gamed environment? Would the quality of political ideas stimulated be as good or better than those garnered by more conventional means?
- Could the game identify particularly important, but poorly understood, topics and questions for further study and resolution? What discoveries flow from this type of analysis that might not reveal other forms and methods?
- Could the game sensitize responsible officials to make potential decisions more realistic, especially with respect to likely political and policy consequences?

A review of these questions and topics in light of present day events strongly suggest their appropriateness.<sup>5</sup>

When addressing these questions, Brewer and others answer with various levels of a qualified “yes”. Their affirmative answer is usually qualified in that games, if designed appropriately, are useful in drawing conclusions about strategic questions. Dr. Watman posits, “Wargaming and the other approaches can be viewed as forms of modeling. A model is a representation of reality simplified to permit examination of the portions of the real world deemed to be of interest to the question at hand. The primary reason for developing models is cost effectiveness. Done properly, they permit experimentation with a phenomenon for far less time and expense than if all experiments had to be done with the material phenomenon itself.”<sup>6</sup>

Wargaming continues to evolve as an effective tool for exercising agency roles and responsibilities in an academic environment and for testing reactions to crisis situations. Dr. Margaret McGown, a game designer at the National Gaming Center, National Defense University (NDU), composed the following list of what games can do at the strategic level.<sup>7</sup>

- Can use exercises to identify and weigh the relevance of constraints, variables and the payoffs of different choices; used cautiously to test theory.
- Can be used in the policy planning to reveal errors or omission in concept, evaluate feasibility, and draw out divided opinion.
- Can force participants (and analysis of results) to give greater weight to probable response-actions which analysts can tend to wish away.
- Can be used as a systematic means of gathering expert opinion in order to develop formal game theoretic models, using a “scenario-bundling method”.
- Qualitative exercises, which require no training or pre-briefing to play, are easiest to recruit senior decision-makers for, thus, generate good information about expert decision-making in current security challenges.

- Can test a whole range of hypotheses if they concern process more than context-dependent outcomes.
- Explore the impact of bounded rational behavior, miscommunication or imperfect information on expert decision-makers.
- Elicit and weigh the impact of players' tacit knowledge and how they retrospectively weigh their decision and the path dependence of their thinking.
- Can identify and weigh the relevance of constraints, variables and the payoff of different choices.

Wargaming plans, decision-making scenarios, actions/reactions, and possible outcomes have some reasonable possibilities to provide beneficial conclusions. Simulating an expected set of conditions and considering realistic reactions can be useful in many areas. Below are other potential benefits wargaming could provide:

- Testing ideas of expected conditions, reactions, and scenarios.
- Getting experts involved in plans and decision making scenarios.
- Further defining roles and responsibilities of players/agencies.
- Evaluating expectations with respect to ends, ways, and means.
- Identifying weaknesses or vulnerabilities in a plan ("Red Teaming").
- Further coordinate and synchronize plans and procedures.
- Identify possible branches and sequels based on external actors reactions.
- Examine the range of an entity (agency's) capability by considering if they can accomplish what they expect achieve with their given resources.
- Use the game to teach players about scenarios, roles, and decision making.

The *Orbis*' Study summarizes their article compilation with the following, "Political and military gaming is an important, if little understood; aspect of the defense planning process....gaming can be a useful instrument for examining the delicate problems of crisis communication and bargaining, escalation, interwar deterrence, conflict termination, and arms control. In this respect it can play an important role in the education of decision makers and the formulation of strategic policy."<sup>8</sup>

Wargaming offers a venue for planners and executors to observe their operating environment and the actors involved through a different lens. Arguably, the result of such a game can be looked at analytically to draw conclusions as to a plan's chances of success. "The point of a wargame is to attempt to learn from simulated mistakes in order to avoid making them..."<sup>9</sup>

Some of the benefits of wargaming are not guaranteed for each application and depend on many factors such as the question being asked, game design, and player knowledge. Wargaming's applicability at the strategic level is even more sensitive to these factors based on the "fuzziness" of detail in all that bears on high-level questions.

### ***How wargaming is being used at the strategic level?***

Considering the preceding overview of wargaming's potential, a look at how they are currently being used should show in what ways organizations are leveraging their benefits. When gaming plans or scenarios at the strategic level, free-form, table-top role playing provides an environment that is flexible to making adjustments to account for intangible forces that may bear on problems at that high level. Often the intricacies of political relationships, complex decision making, and a myriad of potential outcomes are best replicated by experts in their fields who understand these forces and can make play realistic where automated systems cannot. Most

of the game design that is applicable for simulating interagency actions at the strategic level is table-top role playing.

A table-top game puts players into positions where they represent decision makers, agencies, organized bodies, or any figure or organization that needs to be included if its effects are important to the outcomes. It often involves a given set of starting conditions and then progresses in turns or phases determined by the level of detail in time or action the game is to replicate. There are normally established rules that will guide the way players can take action and interact with other players. The outcomes of these actions are usually determined by a control section that oversees these interactions. A fundamental purpose of manual gaming is to encourage creative and innovative thinking about problems that defy treatment with more conventional analytic approaches and methods.<sup>10</sup>

This type of gaming is an effective tool for educational purposes. It is used in many academic institutions to place students into roles or situations to learn how decisions are made and how agencies interact with each other. The National Defense University's crisis action games are examples of using wargaming to educate players as to the possibilities they may face in simulated crisis situations. Margaret McCown of the National Wargaming Center at NDU writes in her article, "Strategic Gaming for the National Security Community" in *Joint Forces Quarterly*, that games are "designed to enhance understanding of crisis decision making in an interagency setting, the forums allow exploration of emerging national security issues and the capabilities and limitations of instruments of national power in dealing with these challenges."<sup>11</sup>

Gaming's use in education is wide-spread in governmental and civilian institutions. Many universities use strategic gaming to allow students to gain a more complete understanding of internal governmental systems and the nature of international relations and diplomacy. Many



institutions hold recurring annual games that look at impacts and possible reactions to international crisis.

U.S. military schools take advantage of strategic gaming to allow students to learn about different staff and governmental functions by role-playing positions. NDU's Institute for National Strategic Studies has developed the Interagency Transformation, Education and Analysis (ITEA) Program at the National Strategic Gaming Center addresses strategic gaming and its application. Their mission is to improve coordination among executive branch departments and agencies, and serve as the national focal point for innovation in education, research, and gaming that addresses interagency planning and response to complex crisis at home and abroad.<sup>12</sup> NDU's efforts in using gaming have focused largely on these two areas, educational and crisis response.

These games are widely used across the national security policy community to teach and analyze a range of strategic-level issues, from bioterrorism to pandemic flu to regional security challenges. They frequently gather very senior decision-makers for multi-move games and examining decision-making in an unfolding crisis. They are referred to as "pol-mil games", "strategic simulation exercises", "tabletop exercises" or "TTX"s. In these exercises, human players, usually in teams, are introduced to a series of strategic dilemmas that are qualitatively presented in a narrative description of a situation, its constraints, payoffs, actors, etc. and are requested to make (also verbally described) decisions in that context.<sup>13</sup> The increasing political and military use of solutions employing a combination of D.I.M.E. assets or demanding joint and interagency coordination point to why it is useful to evaluate these plans in the context of a game before trying them in the field.<sup>14</sup>

NDU's Strategic Gaming Center designs and runs games for the National War College, Industrial College of the Armed Forces (ICAF), and for executive and legislative branch exercises. They produce exercises on a range of topics of contemporary importance, encompassing the homeland, regional, and international dimensions of security policy issues. Some examples of these games are

- Silent Prairie: Examines the issues surrounding a national agricultural bioterrorism incident.
- Impending Storm: Simulates a series of port and surface transportation security incidents that may have been the result of coordinated terrorist act simultaneous with ongoing military operations overseas
- Scarlet Shield: Focus on bioterror attacks in multiple locations
- Dark Portal: Examines policy issues for response to a series of physical and computer-based attacks directed against the homeland.

These games are normally well received by their participants and observers who tout their educational and crisis action simulation benefit. Congressman Jim Turner stated, "It is through exercises such as these that our government can develop a more coordinated and effective response to potential attacks on our homeland...Exercises such as these allow us to discuss in real terms the various choices that we confront with respect to budgets, force sizes, deployments, and uses of cutting-edge technology." Congressman Robert E. Andrews remarked, "These demonstrations allow us to evaluate our readiness to deal with a major terrorist incident and to provide suggestions on how to improve our ability to stop a pending attack."<sup>15</sup>

The results of these games are discussed at after action reviews for the players and controllers. Largely, the learning that goes on is individual, vice institutional. This usually

means that the primary take away from the game benefits the knowledge of the player and does not necessarily result in changes to policy or plans based on the games outcome. Researching strategic games finds that it is largely the case that games are not being used at the strategic level for policy testing or formulation.

### ***What Does Wargaming Not “Do” Well At the Strategic Level?***

It is important to examine what wargaming does not “do” well at the strategic level and how shortcomings may pose obstacles, or cautions, to its use in policy testing or formulation. There are many observations by game researchers that reveal problems about strategic wargames.

The effort to apply wargames to simulate strategic settings is not new. In the 1950s American social science began to simulate official decision making about world events in a controlled setting based on war games and business school games of the time. Dr. Lincoln P. Bloomfield, a former Professor of Political Science at MIT worked with such games from the 50s to the 80s. He observed, “No satisfactory model yet exists of the national security decision making system of the United States (or any other country), nor of the larger system of interactions and perceptions that connects them. Thus one either specifies a crude, oversimplified model or relies on the complex model inside the heads of experienced professionals. How successfully a simulation emulates reality depends on the extent of the players' knowledge of the structures, routines, and probable responses of decision makers. Great pedagogic, but little policy value results from putting inexperienced individuals in the shoes of decision makers.”<sup>16</sup>

He further went on to conclude, “Games do not predict future events or policy outcomes and can be misleading for specific contingency planning purposes. But they can indicate in detail how a future situation might develop and, even more important, why. A little-noticed fact is that

in such games the controlling prediction has already been made: the situation the players face is not of their making, but rather is decided by the game designer. Both MIT and government games relied on scenarios prepared by experts asked to depict a specified future situation in a way that would be accepted by other experts as plausible. A prediction was thereby made that partially determined the game results. Thus, such political exercises (POLEXes) have been biased by game designers, whether for experimental, bureaucratic, or merely frivolous reasons.”<sup>17</sup>

There are, however, significant considerations in using role-play gaming for *analytic* purposes at the strategic level. Specifically, how reliable are the conclusions you make from the outcomes of the game? Dr. Watman cautions about wargaming’s usefulness as a predictor at the strategic level and writes, “the danger, therefore, is that if done carelessly, wargames can seem to the players to produce insights or conclusions that have a basis no more solid than that of a debate or [theatrical] play.”<sup>18</sup>

In a small-scale tactical game, many of the factors that would bear on the outcomes and conclusions are tangible, measurable, and controllable. Planners can have reasonable certainty that elements such as the correlations of forces in direct combat, terrain effects, and communications linkages can be simulated realistically enough that the outcome of their game is meaningful. In automated or computer-based tactical wargames, one can run multiple iterations to increase the reliability of the outcomes thereby increasing their confidence in the conclusions and analysis.

Because of the difficulty in replicating the realities of situational strategic level decision-making, such a wargame may lead to unrealistic actions that would affect the outcome, and therefore the conclusions of the game. The difficulty and time of setting up and running these

games make them ill-suited for multiple iterations that would increase their reliability.

Arguably, wargaming at the strategic level may not be suited for analytical purposes because of the following problems:

- Letting narrative drive the development of scenario: failing to specify constraints' and exercise objectives before writing the "story".
- Failing to associate, even in some descriptive way, some probable payoffs to actors' choices.
- Lacking explicit discussion in the design phase of which topics are best served by having both a "red" and a "blue" team.
- Insufficiently developing a sense of contingency of events (if not decisions) across moves.
- Not pressing players for sufficiently precise decisions and recommendations move-by-move.

Looking at some of these constraints in strategic gaming led Dr. Brewer to make some negative conclusions. "These games never prove anything in a narrow scientific sense. They help to portray the complexities of international conflict; their role-playing aspects provide insights into the special problems of command and control; and they are important educational experiences, providing participants an opportunity to become aware of facts associated with possible conflicts. Discovery is emphasized and highly valued. Positions, expectations, perceptions, facts, and procedures typically are challenged and improved as the game proceeds. Controllers and referees, who are often experts in particular areas, may question a decision or prevent individuals from making certain moves, but their actions are also open to challenge and debate. Thus, imagination and innovation play central roles in the drama of the manual game.

The game also allows players to challenge the initiating scenario, including its explicit and implicit assumptions.<sup>19</sup>

He also concluded, “the fundamental purpose of manual gaming is to encourage creative, innovative thinking about problems that defy treatment with more conventional analytic approaches and methods. This basic goal has not been achieved to the extent that it could and should be. Furthermore, political-military crisis games are best perceived as key elements in a generalized problem solving process. At present, the analytic community shows an unfortunate tendency to believe that a specific model or analysis will provide answers to a given problem. This is unfortunate for several reasons. The most essential: any given analysis or model can represent only one version and vision of reality. More are needed, and the inherent strength of the manual game in this respect calls it to our attention.”<sup>20</sup>

There are undoubtedly areas where games and simulations are difficult to apply. Game designers must consider these shortcomings when setting the scope of the game and use them as a lens when understanding the outcomes. Dr. Paul Bracken describes that even considering these shortcomings; games can still have a benefit. “Game and game theory are neutral tools that do not of themselves produce results. But they can shed light on certain problems. They can sharpen our questions...”<sup>21</sup>

The preponderance of the research as to the reliability of wargames in an analytical role is cautionary at best. There is, however, some agreement that wargaming may be worth while in shedding light on questions about the situation examined. The questions the wargames reveals are more important than the actual results.

***How could strategic wargaming be integrated for interagency planning and what are possible constraints and barriers?***

Beyond educational and crisis action training applications of wargaming, there are greater opportunities to leverage this tool. As mentioned in the introduction, wargaming may have a role in increasing the accuracy and completeness of interagency plans and strategies. As the Center for Strategic and International Studies study “Beyond Goldwater-Nichols” suggests, table-top gaming should be implemented to further refine interagency coordination. Based on the previously identified strengths and weaknesses of wargaming at the strategic level, it is worth examining how this would be further integrated into the process and what factors would inhibit its implementation and full benefit.

Currently there is no requirement for interagency exercises or wargaming as part of the National Security Strategy developmental process. There is, however, some precedent for using wargaming for rehearsal of interagency plans in response to U.S. Government/Military intervention. References to gaming’s use is mainly on the part of DOD publications and is not required, but suggested.

One worthy mention of the suggested use of wargaming for interagency planning is the description of an “interagency rehearsal” in the 2003 National Defense University’s Interagency Management of Complex Crisis Operations Handbook:

“The interagency rehearsal is a decisive coordinating mechanism conducted near the end of the pol-mil planning process. During this process, the Deputies are charged to ensure that the pol-mil plan meets three important tests:

- *Effective*: Specific functional element plans should support the overall USG mission and achieve the pol-mil objectives according to planned milestones and timelines.

- *Integrated:* All agency efforts should be complementary and synchronized during each phase of the operation, according to an overall concept of operations.
- *Executable:* Agencies should meet all legal, resource, and financial requirements prior to authorization of an operation.

If there is time, and the Deputies determine it necessary, two rehearsals may be held.

The interagency rehearsal will almost certainly result in the modification of specific functional element plans or even the overall pol-mil plan. The rehearsal is *part* of the integrated planning process, not the final presentation of a completed plan. Rehearsals are intended to help identify and resolve potential problems an operation could encounter before they become actual problems on the ground.”<sup>22</sup>

This use of wargaming is an excellent example of bringing the important governmental players together to test their response plans. This handbook, though, is just an educational document used at NDU to help teach students possible techniques for interagency planning that may be helpful in real-world applications. It is not a procedure that is currently required by the government. Even inclusion of wargaming in DOD and Joint doctrine does not carry any weight with other agencies.

There are certain factors that make interagency wargaming unpopular in some areas of government. Some of these make the codification of wargaming as part of the strategy formulation process difficult and undesirable. Wargaming can induce transparency into an agency’s capability to bring national power to bear. While the military often leverages this benefit of wargaming to examine a plan’s chance of success, other agencies may see it as exposing their inability to react in certain situations. Results of wargames will possibly identify weaknesses and shortcomings that would require action to address either through policy, budget,



or organizational changes. Going through a wargaming process and identifying an agency's shortfalls might be unattractive to senior officials as it may require them to address a problem they may not want to acknowledge.

Wargaming could also reveal policy or strategy flaws that may be politically difficult to identify or address. If these exercises were conducted at high levels of responsibility, the actual secretary or deputy level, they could expose decision-makers to situations that they might not want to discuss as it may reveal policy or capabilities choices that they do not want to confront. Wargaming might also identify an area of compromise that agencies may not want to admit to or address based on the potential loss of a capability, resource, or degree of authority over a particular area. Some of these factors may explain why, if wargaming or rehearsal occurs at all, it is often at the lower levels of agency administration.

As discussed in the shortcomings section, there are strong feelings that wargames at the strategic level cannot capture realistic applications of D.I.M.E effects as there are too many forces that bear on strategic situations that cannot be replicated. This makes the ability to use the outcomes for analysis questionable. What should be considered is how the scenario could be scoped to examine the specific ways and means the elements of national power could be best employed.

An additional obstacle to establishing strategic wargaming as part of the interagency process is the issue of funding and codifying the practice across administrations. The system of national security counsel's formulation of strategy changes in one form or another from administration to administration. This makes prescribing the use of wargaming difficult to standardize (and budget) within the executive branch. The government is not likely to invest in a process that can easily change or even disappear all together. There are several on-going studies

in the vein of “Beyond Goldwater-Nichols” that are looking at ways Congress can legislate aspects of interagency coordination that will facilitate the U.S. Government’s actions in planning and reaction to crisis situations. As the CSIS recommendation suggests, recurring interagency wargaming should be part of this legislation.

Often times, a wargame is convened only when the NSC or DOD pushes (and funds) the effort. The National Defense University’s Wargaming Center is sometimes called on to organize and run these games. At issue with this is the perception by agencies outside of DOD that the game’s design or outcomes may be biased with a DOD-centric agenda. Even though great effort is made to design and conduct the exercise in a balanced way, this perception can affect the way it is played and how the lessons are taken from the outcomes. Because of this, any serious effort to establish wargaming as part of the interagency and strategy formulation process should include the establishment of a true “white cell” or unaffiliated gaming support structure to conduct balanced games. This wargaming organization could serve in a GAO style function that can organize exercises that are not biased by a parent organization. Several governmental agencies have established gaming centers and staffs similar to those that exist in the Department of Defense. These organizations can contribute to a national gaming effort or be eliminated and allow the national effort to host games requested by the agency.

Often the formulation of national strategy involves the opinions of experts in foreign countries and cultures and what and how national power can achieve policy goals. An interagency gaming construct as part of strategy formulation could leverage this expertise to examine how our nation’s actions are perceived in a more organized way. Wargaming can provide a structure to better examine possible policy actions and outcomes and could better describe international reactions to proposed strategy and their situational impacts.

An important take-away of a codified wargaming methodology as part of interagency planning and strategy formulation would be the agreement to take some action or give consideration to the lessons gained from the exercise. At the most direct level, it could require some policy change or reexamination. It may just result in a further discussion of how the lessons learned through wargaming indicate something to an affected agency as to their approach. The results could also reveal areas that would require further action or coordination within the government to have an intended affect. Organizing this process could serve as a forcing function among decision-makers to approach the question in a more detailed way to have a greater chance of success.

### ***Conclusion***

An examination of the literature and uses of wargaming reveals its potential benefits and applicability at the strategic level. Strategic wargaming (especially table-top, role-playing games) provides a venue that allows participants to engage in an analytical dialogue that enables an exploration of their roles, actions, and possible outcomes of the simulated scenario. There are, however, limitations as to the direct conclusions players can gain from wargaming. Because of the myriad of forces that bear on strategic and policy-level questions, and the assumptions that are required to simulate these settings, the use of wargaming for rigorous analysis is questionable. But, as discussed, the other benefits such as discussing conditions that may drive decisions, synchronizing possible actions, evaluating resources required to take those actions, and discovering other questions that need to be explored about the situations addressed can be powerful takeaways.

The benefit of an organized “exploration” and controlled discussion that wargaming provides should be leveraged as the CSIS recommendations suggest. Thoughtful game design

and energetic participation would create an environment in which interagency partners can better plan and understand their contributions to the government's goals and strategies. It is a good time to move beyond the question of the benefit of wargaming and codify it as one of the tools we use to improve our government's efficiency and synchronization of efforts that could lead to a more successful and complete execution of policy.

There are obstacles to enforcing a wargaming function within the government. Agreement on frequency, level of participation, funding, oversight, time available, and simple cooperation may be difficult to attain and is very often leader/personality driven. These were, however, some of the same obstacles to the Goldwater-Nichols legislation that ushered the military services into an era of increased cooperation and coordination. There will be realized benefits in using wargaming as a tool in the strategy formulation process. By making the process more transparent and increasing the level of discussion and coordination among the various agencies, the government can more completely bring the elements of national power together in a synchronized, meaningful, and realistic way.

## ENDNOTES:

<sup>1</sup> Center for Strategic and International Studies, “Beyond Goldwater-Nichols: U.S. Government and Defense Reform for a New Strategic Era”, (2006) 30.

<sup>2</sup> Kenneth Watman, “War Gaming and its Role in Examining the Future,” *Brown Journal of World Affairs* (Summer/Fall 2003, Volume X, Issue 1) 53.

<sup>3</sup> Watman, 53.

<sup>4</sup> Margaret M. McCown, “Strategic Gaming for the National Security Community,” *Joint Forces Quarterly* (Issue 39) 34-35.

<sup>5</sup> Gary Brewer, “Child of Neglect: Crisis Gaming for Politics and War,” *Orbis, A Journal of World Affairs* (Winter 1984, Volume 27, Number 4) 806.

<sup>6</sup> Watman, 55.

<sup>7</sup> Margaret M. McCown, “Wargames and Policy Analysis,” National Defense University Briefing, (2007).

<sup>8</sup> *Orbis, A Journal of World Affairs* (Winter 1984, Volume 27, Number 4) 783.

<sup>9</sup> James Fallows, “Will Iran be Next?” *The Atlantic Monthly* (December 2004) 100.

<sup>10</sup> Brewer, 811.

<sup>11</sup> Margaret M. McCown, “Strategic Gaming for the National Security Community,” *Joint Forces Quarterly* (Issue 39) 38.

<sup>12</sup> National Defense University, Institute for National Strategic Studies, “Information paper. Interagency Transformation, Education and Analysis (ITEA) Program, National Strategic Gaming Center” (2007) 1.

<sup>13</sup> Margaret M. McCown, “Wargames and Policy Analysis,” National Defense University Briefing, (2007).

<sup>14</sup> Margaret M. McCown, “Strategic Gaming for the National Security Community,” *Joint Forces Quarterly* (Issue 39) 36.

<sup>15</sup> National Defense University, “Strategic Policy Forum Exercises,”

<http://www.ndu.edu/INSS/SPF/index.cfm?pageID=124&type=page>, (2008) 1.

<sup>16</sup> Lincoln P. Bloomfield, “Reflections on Gaming,” *Orbis, A Journal of World Affairs* (Winter 1984, Volume 27, Number 4) 785.

<sup>17</sup> Bloomfield, 790.

<sup>18</sup> Watman, 52.

<sup>19</sup> Brewer, 805.

<sup>20</sup> Brewer, 811.

<sup>21</sup> Paul Bracken, “Deterrence, Gaming, and Game Theory,” *Orbis, A Journal of World Affairs* (Winter 1984, Volume 27, Number 4) 802.

<sup>22</sup> National Defense University, “Interagency Management of Complex Crisis Operations Handbook” (January 2003, [http://www.maxwell.af.mil/au/awc/awcgate/ndu/interagency\\_complex\\_crisis.doc](http://www.maxwell.af.mil/au/awc/awcgate/ndu/interagency_complex_crisis.doc)) 12-13.